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SPACE OPERATIONS CONTROL CENTER

SATELLITE SITUATION REPORT

VOL. 3, NO. 16

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AUGUST 15, 1963	XEROX \$ <u> </u>
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GODDARD SPACE FLIGHT CENTER

GREENBELT, MD.



SPACE OPERATIONS CONTROL CENTER
GODDARD SPACE FLIGHT CENTER
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

VOLUME 3 NO. 16

AUGUST 15, 1963

SATELLITE SITUATION REPORT

THE FOLLOWING REPORT REFLECTS DATA COMPUTED AND COMPILED BY THE
GODDARD SPACE FLIGHT CENTER, NORAD, AND SMITHSONIAN ASTROPHYSICAL
OBSERVATORY AS OF 1200Z ON AUGUST 15, 1963.

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>OBJECTS IN ORBIT</u>				<u>PERIGEE Km.</u>	<u>APOGEE Km.</u>	<u>INCLINATION</u>	<u>TRANSMITTING FREQ. (MC/S)</u>
			<u>LAUNCH</u>	<u>NODAL PERIOD</u>	<u>1</u>	<u>APPROX. PERIOD</u>				
<u>1958 LAUNCHES</u>										
ALPHA 1	EXPLORER 1	US	1 FEB	104.9	33.19	1648	343	641		
BETA 1	ROCKET BODY	US	17 MAR	138.4	34.25	4340	641	659	108.023 &	
BETA 2	VANGUARD 1	US	17 MAR	133.8	34.17	3930				
<u>1959 LAUNCHES</u>										
ALPHA 1	VANGUARD 2	US	17 FEB	125.2	32.87	3292	550			
ALPHA 2	ROCKET BODY	US	17 FEB	129.6	32.95	3615	607			
ETA 1	VANGUARD 3	US	18 SEP	129.7	33.36	3720	515			
MU 1*	LUNIK 1	USSR	2 JAN	450 D	0.01	1.315AU	0.9766AU			
NU 1*	PIONEER 4	US	3 MAR	398 D	1.30	1.142AU	0.9871AU			
IOTA 1	EXPLORER 7	US	13 OCT	101.1	50.31	1075	551			
IOTA 2	ROCKET BODY	US	13 OCT	100.9	50.30	1075	534			
<u>1960 LAUNCHES</u>										
ALPHA 1*	PIONEER 5	US	11 MAR	312 D	3.35	0.995AU	0.8061AU			
BETA 1	ROCKET BODY	US	1 APR	99.0	48.35	737	697			
BETA 2	TIROS 1	US	1 APR	99.1	48.39	754	686			
BETA 3	NONE	US	1 APR	97.8	48.47	673	643			
BETA 4	NONE	US	1 APR	99.8	48.14	819	689			
GAMMA 2	TRANSIT 1B	US	13 APR	94.2	51.25	597	364			
GAMMA 4	NONE	US	13 APR	96.7	51.26	736	473			
EPSILON 3	NONE	USSR	15 MAY	92.0	64.96	482	259			
ZETA 1	MIDAS 2	US	24 MAY	94.2	33.07	510	463			
ETA 1	TRANSIT 2A	US	22 JUN	101.6	66.69	1051	620			
ETA 2	GREB	US	22 JUN	101.6	66.69	1052	616			
ETA 3	ROCKET BODY	US	22 JUN	101.4	66.66	1026	623			
IOTA 1	ECHO 1	US	12 AUG	114.9	47.28	1891	1021			
IOTA 2	ROCKET BODY	US	12 AUG	118.0	47.23	1679	1509			
IOTA 3	METAL OBJECT	US	12 AUG	118.2	47.21	1686	1518			
IOTA 4	METAL OBJECT	US	12 AUG	118.3	47.28	1671	1549			
IOTA 5	METAL OBJECT	US								

OBJECTS IN ORBIT

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>PERIOD</u>	<u>NODAL</u>	<u>INCLINATION</u>	<u>APOGEE Km.</u>	<u>PERIGEE Km.</u>	<u>TRANSMITTING FREQ. (MC/S)</u>
1960 LAUNCHES									
NU 1	COURIER 1B	US	4	OCT	106.9	28.36	1204	975	
NU 2	ROCKET BODY	US	4	OCT	106.4	28.27	1198	937	
XI 1	EXPLORER 8	US	3	NOV	112.3	49.93	2253	421	
XI 2	ROCKET BODY	US	3	NOV	112.0	49.96	2217	424	
XI 3	NONE	US	3	NOV	109.8	49.38	2040	400	
XI 4	NONE	US	3	NOV	110.8	50.50	2108	427	
PI 1	TIROS 2	US	23	NOV	98.2	48.47	740	609	
PI 2	ROCKET BODY	US	23	NOV	98.0	48.49	694	643	
PI 3	NONE	US	23	NOV	98.1	48.51	722	620	
PI 4	NONE	US	23	NOV	98.2	48.50	743	612	
1961 LAUNCHES									
ALPHA 1	SAMOS 2	US	31	JAN	94.8	97.43	538	475	
ALPHA 2	METAL OBJECT	US	31	JAN	94.7	97.44	548	459	
GAMMA 1*	VENUS PROBE	USSR	12	FEB	300 D	0.58	1.019AU	0.7183AU	
DELTA 1	EXPLORER 9	US	16	FEB	116.0	38.92	2531	486	
DELTA 2	ROCKET BODY	US	16	FEB	118.4	38.85	2606	624	
DELTA 3	NONE	US	16	FEB	INSUFFICIENT OBSERVATIONS				
KAPPA 1	EXPLORER 10	US	25	MAR	POSITION UNCERTAIN				
NU 1	EXPLORER 11	US	27	APR	107.8	28.84	1764	501	
OMICRON 1	TRANSIT 4A	US	29	JUN	103.8	66.80	992	886	
OMICRON 2	INJUN-SR-3	US	29	JUN	103.8	66.81	994	886	
OMICRON 3-186**	METAL OBJECTS	US	29	JUN	INSUFFICIENT OBSERVATIONS				
RHO 1	TIROS 3	US	12	JUL	100.3	47.88	814	742	
RHO 2	ROCKET BODY	US	12	JUL	100.3	47.89	805	745	
RHO 3	METAL OBJECT	US	12	JUL	98.8	47.93	806	601	
RHO 4	METAL OBJECT	US	12	JUL	101.9	47.81	929	779	
SIGMA 1	MIDAS 3	US	12	JUL	161.5	91.25	3501	3389	
SIGMA 3	METAL OBJECT	US	12	JUL	161.2	91.20	3544	3318	
SIGMA 4	METAL OBJECT	US	12	JUL	161.9	91.22	3557	3365	
UPSILON 1	EXPLORER 12	US	16	AUG	INSUFFICIENT OBSERVATIONS				
A DELTA 1	MIDAS 4	US	21	OCT	166.0	95.89	3745	3507	

OBJECTS IN ORBIT

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>NODAL PERIOD</u>	<u>INCLINATION</u>	<u>APOGEE Km.</u>	<u>PERIGEE Km.</u>	<u>TRANSMITTING FREQ. (MC/S)</u>
1961 LAUNCHES								
A DELTA 3	METAL OBJECT	US	21 OCT	165.6	95.84	3712	3508	
A DELTA 4	METAL OBJECT	US	21 OCT	166.4	95.97	3772	3514	
A ETA 1	TRANSIT 4B	US	15 NOV	105.6	32.44	1127	935	
A ETA 2	TRAAC	US	15 NOV	105.6	32.44	1115	949	
A ETA 3	ROCKET BODY	US	15 NOV	105.5	32.43	1103	946	
1962 LAUNCHES								
ALPHA 1*	RANGER 3	US	26 JAN	406.4D	.3988	1.163AU	0.9839AU	
ALPHA 2	ROCKET BODY	US	26 JAN	INSUFFICIENT OBSERVATIONS				
BETA 1	TIROS 4	US	8 FEB	100.3	48.29	840	712	
BETA 2	ROCKET BODY	US	8 FEB	101.3	48.12	956	689	
BETA 3	METAL OBJECT	US	8 FEB	99.4	48.42	768	699	
BETA 4	METAL OBJECT	US	8 FEB	100.2	48.30	828	719	
ZETA 1	ORB. SOL. OBS. 1	US	7 MAR	95.9	32.83	575	564	
ZETA 2	ROCKET BODY	US	7 MAR	95.9	32.82	593	549	
iota 1	COSMOS 2	USSR	6 APR	88.7	48.89	274	158	
KAPPA 1		US	9 APR	153.0	86.74	3391	2804	
KAPPA 3		US	9 APR	152.7	86.65	3369	2795	
KAPPA 4		US	9 APR	153.4	86.64	3420	2804	
MU 2	ROCKET BODY	US	23 APR	INSUFFICIENT OBSERVATIONS				
OMICRON 1	ARIEL	US/UK	26 APR	100.6	53.87	1185	396	
OMICRON 2	ROCKET BODY	US/UK	26 APR	100.6	53.85	1178	398	
SIGMA 1		US	15 MAY	91.6	82.29	413	284	
OMEGA 1		US	18 JUN	90.8	82.12	312	311	
A ALPHA 1	TIROS 5	US	19 JUN	100.4	58.10	955	607	
A ALPHA 2	ROCKET BODY	US	19 JUN	100.4	58.10	946	609	
A ALPHA 3	METAL OBJECT	US	19 JUN	101.7	58.21	1077	606	
A ALPHA 4	METAL OBJECT	US	19 JUN	99.1	58.02	838	595	
A EPSILON 1	TELSTAR 1	US	10 JUL	157.7	44.79	5631	957	
A EPSILON 2	ROCKET BODY	US	10 JUL	157.5	44.79	5617	957	

OBJECTS IN ORBIT

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>NODAL PERIOD</u>	<u>INCLINATION</u>	<u>APOGEE Km.</u>	<u>PERIGEE Km.</u>	<u>TRANSMITTING FREQ. (MC/S)</u>
1962 LAUNCHES								
A XI 1	COSMOS 8	USSR	18 AUG	88.0	48.93	188	173	
A OMICRON 1		US	23 AUG	99.6	98.66	848	625	
A OMICRON 2		US	23 AUG	98.3	98.66	731	621	
A OMICRON 3		US	23 AUG	100.9	98.67	968	626	
A OMICRON 4		US	23 AUG	99.6	98.66	850	621	
A RHO 1*	MARINER 2	US	27 AUG					
A RHO 2*	ROCKET BODY	US	27 AUG					
A UPSILON 1		US	1 SEP	93.2	82.81	566	286	
A PSI 1	TIROS 6	US	18 SEP	98.7	58.30	714	683	136.2333;136.922
A PSI 2	ROCKET BODY	US	18 SEP	98.7	58.30	708	683	
A PSI 3	METAL OBJECT	US	18 SEP	99.4	58.44	779	680	
A PSI 4	METAL OBJECT	US	18 SEP	98.0	58.21	690	640	
B ALPHA 1	ALOUETTE	CANADA	29 SEP	105.5	80.47	1033	1001	136.978;136.591
B ALPHA 2	ROCKET BODY	US	29 SEP	105.5	80.48	1030	998	
B ALPHA 3	METAL OBJECT	US	29 SEP	105.4	80.54	1027	995	
B ALPHA 4	METAL OBJECT	US	29 SEP	105.5	80.46	1038	995	
B GAMMA 1	EXPLORER 14	US	2 OCT	2184.9	40.00	97053	1745	136.440
B GAMMA 2	ROCKET BODY	US	2 OCT					
B ETA 1	RANGER 5	US	18 OCT					
B ETA 2	ROCKET BODY	US	18 OCT					
B THETA 1		USSR	20 OCT	93.8	48.93	693	235	
B KAPPA 1		US	26 OCT	142.0	71.45	5053	233	
B LAMBDA 1	EXPLORER 15	US	27 OCT	314.2	17.98	17580	308	
B MU 1	ANNA 1B	US	31 OCT	107.8	50.15	1179	1082	
B MU 2	ROCKET BODY	US	31 OCT	107.5	50.14	1170	1062	
B NU 3		USSR	1 NOV	519 D	2.683	1.604AU	0.9237AU	
B TAU 1		US	13 DEC	113.8	70.35	2563	237	
B TAU 2	INJUN 3	US	13 DEC	114.9	70.36	2659	244	\$136.867
B TAU 4		US	13 DEC	112.5	70.46	2430	247	
B TAU 5		US	13 DEC	113.7	70.36	2556	238	
B TAU 6		US	13 DEC	114.6	70.35	2632	243	
B UPSILON 1	RELAY 1	US	13 DEC	185.0	47.51	7446	1312	136.141;136.620

OBJECTS IN ORBIT

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>NODAL PERIOD</u>	<u>INCLINATION</u>	<u>APOGEE Km.</u>	<u>PERIGEE Km.</u>	<u>TRANSMITTING FREQ. (MC/S)</u>
1962 LAUNCHES								
B UPSILON 2	ROCKET BODY	US	13 DEC	184.8	47.52	7435	1307	
B CHI 1	EXPLORER 16	US	16 DEC	104.3	52.00	1192	738	\$136.861; \$136.200
B PSI 1	TRANSIT 5A	US	19 DEC	99.2	90.63	724	706	
B PSI 2		US	19 DEC	97.9	90.71	735	575	
B PSI 3		US	19 DEC	99.1	90.62	735	694	
B PSI 4		US	19 DEC	100.3	90.45	845	693	
1963 LAUNCHES								
1963 3A		US	16 JAN	94.6	81.88	537	458	
1963 3B		US	16 JAN	93.3	81.87	455	412	
1963 3C		US	16 JAN	93.8	81.89	493	422	
1963 4A	SYNCOM	US	14 FEB	1426.4	33.51	37014	34182	
1963 4B	ROCKET BODY	US	14 FEB	602.2	33.12	34259	248	
1963 5A		US	19 FEB	97.8	100.48	793	507	
1963 5B		US	19 FEB	97.8	100.48	790	509	
1963 5C		US	19 FEB	97.1	100.48	758	473	
1963 5D		US	19 FEB	98.4	100.47	832	532	
1963 8B	USSR	2 APR						
1963 9A	EXPLORER 17	US	3 APR	96.0	57.60	869	265	
1963 9B	ROCKET BODY	US	3 APR	93.9	57.58	682	255	
1963 10A		USSR	13 APR	89.7	48.85	298	227	
1963 13A	TELSTAR 2	US	7 MAY	225.2	42.75	10802	975	
1963 13B	ROCKET BODY	US	7 MAY	225.0	42.85	10777	980	
1963 14A		US	9 MAY	166.5	87.31	3661	3628	
1963 14B		US	9 MAY	166.5	87.35	3684	3607	136.892
1963 14C		US	9 MAY	166.5	87.34	3680	3610	136.415
1963 14D		US	9 MAY	166.5	87.36	3675	3613	
1963 14E		US	9 MAY	166.1	87.32	3659	3602	
1963 14F		US	9 MAY	166.9	87.50	3674	3646	
1963 14G		US	9 MAY	166.5	87.42	3719	3570	
1963 17A		USSR	22 MAY	94.5	48.93	768	249	
1963 17B		USSR	22 MAY	90.6	48.99	362	258	
1963 17C		USSR	22 MAY	96.0	49.24	811	331	
1963 17D		USSR	22 MAY	91.2	49.07	399	275	
1963 17F		USSR	22 MAY	95.6	49.32	777	322	

OBJECTS IN ORBIT						
OBJECT	CODE NAME	SOURCE	LAUNCH	NODAL PERIOD	INCLINATION	APOGEE Km.
						PERIGEE Km.
1963 LAUNCHES						
1963 17G		USSR	22 MAY	94.2	48.93	714
1963 22A		US	16 JUN	99.8	90.01	755
1963 22B		US	16 JUN	99.8	90.02	762
1963 22C		US	16 JUN	101.3	90.25	889
1963 22D		US	16 JUN	98.3	89.83	762
1963 24A	TIROS 7	US	19 JUN	97.4	58.22	658
1963 24B	ROCKET BODY	US	19 JUN	97.4	58.21	653
1963 24C	METAL OBJECT	US	19 JUN	97.9	58.36	686
1963 24D	METAL OBJECT	US	19 JUN	96.9	58.10	648
1963 25B		US	27 JUN	132.5	82.11	4117
1963 26A	RESEARCH SATELLITE FOR GEOPHYSICS	US	28 JUN	102.1	49.72	1299
1963 27A		US	29 JUN	94.8	82.31	526
1963 27B		US	29 JUN	94.7	82.30	513
1963 30A		US	18 JUL	167.9	88.41	3734
1963 30B		US	18 JUL	COMPUTATIONS IN PROGRESS		
1963 30C		US	18 JUL	167.5	88.40	3712
1963 30D		US	18 JUL	168.0	88.42	3744
1963 30E		US	18 JUL	168.3	88.39	3749
1963 31A	SYNCOM 2	US	26 JUL	COMPUTATIONS IN PROGRESS		
						36688
						136.980;136.486
						1814.069;1815.794
						1820.177
1963 31B	ROCKET BODY	US	26 JUL	636.5	33.15	36029
1963 33A		USSR	6 AUG	92.1	48.99	500
1963 33B		USSR	6 AUG	92.0	49.00	489

* APHELION PERIHELION IN ASTRONOMICAL UNITS, INCLINATION TO ECLIPTIC.

** ONE HUNDRED AND EIGHTY THREE METAL OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1961 OMICRON 1 AND 1961 OMICRON 2. OBJECTS OF THIS SERIES THAT HAVE DEAYED CAN BE FOUND IN THE DECAYED OBJECTS LISTS.

\$ TRANSMITTING ON COMMAND ONLY.
& TRANSMITTING WHEN IN SUNLIGHT ONLY.

PLEASE ADD THE FOLLOWING TO THE DECAYED OBJECTS LIST

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>DECAY</u>
1963 21A		US	15 JUN	7 AUG 63
1963 21C		US	15 JUN	1 AUG 63
1963 29A	SOLAR RADIATION	US	18 JUL	13 AUG 63
1963 32A		US	31 JUL	11 AUG 63
1963 32B		US	31 JUL	10 AUG 63